Responsible Authorship, Publication Practices, and Peer Review

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Why Publish?

Publications are a Point in Time

- Peer Review Issues
- Problems in Multiple Authorships
- Who is an Author?
- Importance of Authorship
- Importance of Publication

(Adapted from Columbia U.)

Overview of Publication and Peer Review

3/5/2010
Just follow the formula: HHD.

Determining authorship should be easy—well, right?

The way it is...
ICMJE Guidelines (brief)

Guidelines: Journal Editors, Subscribers to the
International Committee of Medical Journal Editors

1. Over the years, ICMJE has issued updated
Guidelines, which are called Editions. Each
Edition is the responsibility of the
International Committee of Medical Journal Editors.

2. A suitable point for discussion of authorship
termination of authors.

3. Each author should also have an
understanding of who among many
participants is responsible for
writing, submission, and editing work.

4. Contributions recognized, acknowledged, and
acknowledged.

Authors should meet conditions 1, 2, and
3. Final approval of the version to be published.

The International Committee of Medical
Editors' Guidelines for the Preparation of
Manuscripts Submitted to Biomedical Journals:
Approximately 500

• first authors: important in the discipline
• first authors: important in the discipline

Getting it Right -- 3

3/5/2010
Authorship Accountability


Other findings regarding authorship

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Peer Reviewer Responsibilities

- Responsibilities to Scarcity
- Constructive Criticism
- Exceptions to Confidentiality
- Confidentiality
- Impeccability
- Competence
- Responsibility

Peer Review Process

- Reviewer follows the ability to get articles published in peer-reviewed journals. Professional advancement is based on merit. Editors receive articles and evaluate them for suitability. Reviewers evaluate the content of articles and provide feedback.
- Cancer Institute of the Institute of Medical Research (IMR) in Malaysia, developed the national guide for peer review of research. Throughout the process, the same standard is applied.

Issues

- Material transfer agreements (MTAs)
- Research
- Non-disclosure agreements (NDAs)
- Conflict of interests
- Application restrictions
- Review of applications
- Many industry contracts ask for manuscripts on restrictions in work publications.

Publications Restrictions

3/5/2010
Dr. Jonathan Perry, a tenured professor, used his sabbatical to visit the laboratory of Dr. Brian Chandler, a widely published and respected senior scientist. During his stay in Dr. Chandler's lab, Dr. Perry hoped to learn certain techniques of molecular biology that he would employ in his own research. To afford Dr. Perry this opportunity, Dr. Chandler assigned him a leading role in a new project that the lab was undertaking. After seven months, laboratory work on the project was completed, and Dr. Perry returned to his own institution to begin work on a paper to report the final results. Ultimately, many drafts of the paper were faxed back and forth between laboratories until Dr. Perry received the penultimate version from Dr. Chandler's lab. On this version, a new name, J. B. Martin, Ph.D., appeared among the authors listed. Dr. Perry had never met Dr. Martin, never worked with him on any technical aspect of the project, and had never heard his name or ideas mentioned in the laboratory meetings in which the project was planned or the results discussed.

Dr. Perry called Dr. Chandler and questioned the addition of Dr. Martin as an author on the manuscript. Dr. Chandler stated that, due to prior collaborations, it was a longstanding policy to include Dr. Martin on all publications coming out of Dr. Chandler's laboratory. Dr. Martin's laboratory had a reciprocal agreement, he added. Dr. Perry stated that he did not feel that Dr. Martin was a qualified author on this particular paper since he had not made a significant contribution to the work being published. Dr. Chandler replied that Dr. Perry did not have the right to question the policy of a laboratory in which he had worked as an invited guest. Dr. Perry maintained his position that Dr. Martin did not belong as an author on the paper and further stated that if Dr. Chandler insisted on including Dr. Martin's name, then, as first author, Dr. Perry would not allow the paper to be submitted. Dr. Chandler responded, "Well, you can withdraw your name, but the work was done here in my laboratory and we plan to submit the paper for publication."

Questions

- What do you think of the reciprocal agreement between Dr. Martin's and Dr. Chandler's laboratories? Were Dr. Perry's concerns legitimate?
- Dr. Perry was a tenured professor at a different institution from Dr. Chandler's. Under these circumstances it may have been relatively easy for him to voice his concerns to Dr. Chandler. What difficulties might a postdoctoral or graduate student in Dr. Chandler's lab have in handling this situation? How might those difficulties be overcome?
- The results of this project are significant and provide a novel insight into the field that could prove beneficial to many investigators in the area. Therefore, should Dr. Perry compromise with Dr. Chandler so that the paper can be promptly published? Which consideration--authorship or publication--is more important in the advancement of science?
- What do you think of Dr. Chandler's statement in the concluding sentence of the case? Would it be appropriate for Dr. Chandler to proceed with publishing the paper? What are Dr. Perry's and Dr. Chandler's rights with respect to the data and the publication of the data?
- Assume that Dr. Martin in fact reviewed and commented on all drafts of the paper in question. Could this contribution to the effort be significant enough to merit authorship?
Bob Powell, a postdoctoral fellow in biochemistry, has just completed a manuscript detailing the results from the first project in which he has taken a leading role. The focus of his project has been to discern the ways in which humans metabolize sulfites, a class of chemicals commonly used to preserve wines and dried fruits. Although he had developed the rough outlines of the project on his own, he owes much to individuals both inside and outside his lab. The assistance he received from others includes the following:

A colleague at another university, a toxicologist specializing in food additives, shared with Bob his previous work on the in vivo activity of sulfites, information that allowed Bob to choose the ideal animal model for the experiment—the Abyssinian field mouse. A friend of his, who happened to be a wildlife specialist, provided Bob with much advice on rearing and maintaining a colony of Abyssinian field mice such that he would have a stable pool of animal subjects. A highly experienced technician in the lab gave Bob advice on modifying an assay he had been using, which finally allowed him to measure successfully sulfite metabolites in mouse urine. This technician also assisted in writing up the methods section of the paper. The number of assays that Bob had to conduct was quite sizable and more than he could manage on his own, given other demands of the project. Thus, an undergraduate college student collected most of the urine samples and conducted the assays yielding the data. Finally, a senior researcher in a neighboring lab who took an interest in Bob's career offered to review the initial drafts of Bob's paper. By the end of the writing process, this researcher had helped Bob outline the paper, suggested a few additional experiments that strengthened the paper's conclusions, and made a number of editing changes in the penultimate draft that enhanced the paper's clarity.

Questions

- What kind of attribution should be given to each of these individuals who contributed in one way or another to Bob's project? For example, who should be recognized as an author and who should receive an acknowledgment in the paper? Who does not merit formal recognition?

- What criteria should be applied when determining whether to list someone as an author?

- What criteria should be applied to note someone's contributions in the acknowledgments?

- What are the responsibilities of authors in representing the contributions of others?

- At what point in the process of conducting and reporting on one's research should decisions concerning authorship and acknowledgments be made?

- Are decisions concerning attribution entirely Bob's responsibility? Should he consult with others? Why or why not?
Esther Brezinska is an assistant professor at a medical school where she has been employed in a tenure-track appointment since completing a productive postdoctoral research fellowship five years ago. Two years ago, she was awarded her first investigator-initiated grant from the National Institutes of Health and is now anticipating preparation of a competitive renewal application for submission next year. Next year, she also will be evaluated for promotion to associate professor and award of tenure.

Dr. Brezinska has developed a successful technique for culturing prostatic epithelial cells. Her NIH grant was awarded on the basis of that success and the promise that the technique holds for testing a variety of growth promoting and inhibitory substances. Her work has important implications for the diagnosis and treatment of prostate cancer.

At this juncture, Dr. Brezinska has tested two hormones and two growth factors with positive and potentially exciting results. Experiments utilizing five more substances are in various stages of progress, and she has plans to test at least five additional agents. She believes that it is time to publish these results beyond the abstracts and poster presentations that she has regularly presented at meetings as the work progressed. Now she faces a dilemma.

The most prestigious journal in her field requests authors “not to separate fragments of a study into individual reports, but rather to strive for full development of a topic.” On the other hand, she suspects that the medical school’s promotion committee emphasizes numbers of publications over the quality of content when reviewing bibliographies of candidates for tenure. She wonders if the NIH section that will review her renewal application will be similarly disposed. It would be easy to write up the results of the first four experiments as a single report, since they are closely related, but it might be of strategic value to have four separate references in her curriculum vitae.

Questions

- What should be Dr. Brezinska’s primary considerations as she evaluates how to publish her research findings in the scientific literature?
- If she opts for publishing a few comprehensive reports, rather than a greater number of less substantive papers, by what mechanism can her various evaluators know that she is attempting to make a more scholarly contribution?
- If Dr. Brezinska were at your institution, what kind of advice would she likely get from her department chair or mentor concerning her dilemma?
- A Japanese scientist whom she knew as a postdoctoral fellow has offered to translate Dr. Brezinska’s publications into Japanese and to submit them to a Japanese language journal that appears to be anxious to publish her work. Dr. Brezinska rationalizes that this will increase readership of her work in Japan, enhance her international reputation, and at the same time provide additional titles (in Japanese) in her curriculum vitae. Would she violate any fundamental principles in doing so?
- Dr. Gordon Ryan, an assistant professor in the Department of Urology, has been invaluable in providing prostatic cells for Dr. Brezinska’s studies. She, in turn, has helped him with the technicalities of immunocytotoxicological procedures in his own investigations. Dr. Ryan suggests that if each of them lists the other as a co-author in their respective publications, both of their prospects for promotion might be enhanced. Dr. Brezinska suspects that a refusal to engage in this practice might jeopardize chances for Dr. Ryan’s future cooperation. How can she resolve this issue productively?
A graduate student is invited to join a team of faculty members and postdoctoral fellows from his faculty advisor's laboratory in an ongoing study of poverty in the state's three largest cities. The faculty advisor will not be actively involved in this study due to an imminent sabbatical.

Although the student's work will constitute a large part of his dissertation, within the study itself, his contribution is not considered significant enough to merit the student being listed as an author on manuscripts resulting from the study. Accordingly, the faculty advisor and student verbally agree upon the student's role in the study, and the faculty advisor does not amend the written authorship agreement that exists among the other team members.

After the faculty advisor leaves for sabbatical, the senior researcher in the laboratory takes the student aside and asks the student if he will assume most of her data collection and analysis responsibilities for the study due to her busy schedule. Seeing this as an opportunity to gain valuable experience, the student agrees.

Near the end of the study, the senior researcher asks the student to help a postdoctoral fellow to draft major portions of the study's first manuscript. Although the senior researcher originally agreed to prepare the first manuscript and to be the corresponding author, she states that she is too busy preparing a grant proposal to prepare the manuscript. The student assists the postdoctoral fellow with the manuscript preparation and subsequently the student makes all the revisions submitted by the other team members.

When the student reads the final manuscript and the accompanying letter from the senior researcher (in her role as corresponding author) to the journal editor, he notes the following:

- The faculty advisor is listed as first author.
- The senior researcher is listed as second author.
- The senior researcher states that her own contributions to the study include data collection and analysis, and manuscript preparation.
- The graduate student is listed in the acknowledgements section for his technical assistance.
- The postdoctoral fellow is not credited with preparing the manuscript.